REMARKS

Reconsideration of the present application, as amended, is respectfully requested.

By means of the present amendment, the drawings have been amended to change reference numeral 76 in FIG 2 to 77, for conformance with description thereof on page 8, line 11 of the specification. A replacement sheet including FIGs 1-2 is enclosed. Further, an annotated drawing sheet with marked-ups in red of the sheet showing changes to FIG 2 is enclosed for convenience. Applicant respectfully requests approval of the enclosed proposed drawing changes.

By means of the present amendment, the current Abstract has been amended as shown in the enclosed Replacement Abstract to remove legal phraseology. Further, the specification has been amended to correct typographical errors.

In the Office Action, the Examiner objected to the specification for inclusion of a hyperlink and/or other form of browser-executable code on page 3, line 9 of the specification. It is respectfully that this URL is not intend to be an active link, and is included as a reference as to where information about the

IN THE DRAWING

Please replace FIG 2 with the enclosed substitute FIG 2.

MERL system may be found. According to MPEP §608.01.VII, Examiners should not object to inactive hyperlinks. Accordingly, withdrawal of the objection to the specification is respectfully requested.

In the Office Action, claims 1-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over "Tangible Interactions + Graphical Interpretation: A New Approach to 3D Modeling," by David Anderson *et al.* (Anderson) in view of U.S. 6,262,711 (Cohen). It is believed that the reference to Cohen on page 3, section 4.1 of the Office Action as 5,013,6,262,711 is a typographical error, and the correct reference is 6,262,711. In response, the following remarks are presented. It is respectfully submitted that claims 1-20 are patentable over Anderson and Cohen for at least the following reasons.

Anderson discloses a modeling system where physical building blocks that self-describe are assembled, and the system determines the geometry of the assembled blocks. As correctly noted by the Examiner, Anderson does not teach a baseboard for mounting component thereon, as recited in independent claims 1, 14, 16 and 18-19. Cohen is cited in an attempt to remedy this deficiency in Anderson.

Cohen is directed to a computerized interface system where a detection system includes a detection field 26, shown in FIG 3, which can detect the positions of interactors 34 located thereon. The Cohen system can be controlled by the interaction of the interactors 34 with the detection field 26, namely, to control other systems, such as audio systems or videotape marking systems.

It is respectfully submitted that the combination of Anderson and Cohen appears to require impermissible hindsight, since there is no teaching, suggestion or motivation for such a combination. Anderson is concerned with modeling while Cohen is concerned with controlling audio/video systems. One skilled in the art of computer modeling would not turn to Cohen which is totally silent and unrelated to computer modeling; rather Cohen is directed to controlling audio or video systems. Neither Anderson nor Cohen provides any suggestion or motivation for any combination thereof or modification of the Anderson modeling system.

The Anderson modeling system works without any baseboard or the detection field of Cohen, thus there is no need or motivation to modify the Anderson modeling system with the Cohen detection field. The Cohen detection field detects the positions of the

interactors. However, the Anderson modeling system already knows the relative positions of the connected blocks, and thus there is no motivation to modify the Anderson modeling system to include the Cohen detection field. Anderson does not recognize the need to further simplify virtual modeling using a baseboard, and thus provides no motivation or suggestion for modification or combination with Cohen, unless improper hindsight is used.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. See, MPEP §2143.

Since Anderson, Cohen, or combination thereof, does not meet this threshold, Applicant respectfully traverses the obviousness rejection of claims 1-20, particularly because the combination of Anderson and Cohen is not proper, and assuming *arguendo* that this combination is proper, such a combination still does not disclose,

suggest or provide motivation to make the required modification. At best, the combination Anderson and Cohen provides a modeling system where the position of interactors on a detection field is used to control audio/video systems.

Anderson and Cohen, alone or in combination, do not teach or suggest "the computer determining the position and dimensions of each component mounted on the baseboard based on the sensor data, and the computer creating a virtual model to be displayed on a computer display of a structure representative of an arrangement of the components **when** mounted on the baseboard" as recited in independent claim 1, with similar recitations in independent claims 14, 16 and 18-19.

Further, there is no teaching or suggestion in Anderson, Cohen, or combination thereof, of resistors as recited in independent claim 14, as well as in dependent claims 11 and 17; or voltmeter, ammeter and a switching network as recited in independent claim 18; or applying and measuring various voltages as recited in independent claim 19, as well as in dependent claim 8. Sections 2.1 and 2.2 of Anderson have been cited in rejecting claims 14 and 18-19, however the noted features are not found

anywhere in these sections.

Accordingly, it is respectfully submitted that independent claims 1, 14, 16 and 18-19 be allowed. In addition, it is respectfully submitted that claims 2-13, 15, 17 and 20 should also be allowed at least based on their dependence from independent claims 1, 14, 16 and 19.

Dependent claim 6 also includes patentable subject matter. In particular, Anderson, Cohen, or combination thereof, do not teach or suggest that "the identification label for each component comprises a magnetic signature." The magnets of Cohen, noted by the Examiner on page 6, section 4.1.5 of the Office Action, are not used or related to magnetic signature. Rather, the Cohen magnets are simply used for attachment.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

If any informalities remain, the Examiner is requested to telephone the undersigned in order to expedite allowance.

Please charge any fee deficiencies and credit any overpayments to Deposit Account No. 14-1270.

Respectfully submitted,

By _____
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Attorney
(914) 333-9607
February 14, 2005

Enclosure: Replacement drawing sheet (1 sheet with FIGs 1-2)
Annotated sheet (1 sheet showing changes to FIG 2)
Replacement Abstract

CERTIFICATE OF MAILING

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REPLACEMENT ABSTRACT

A system for creating a virtual model of a physical structure ~~in accordance with the present invention comprises~~ includes a baseboard~~; at least one~~, a sensor ~~providing sensor data; at least one~~ and a building component capable of being sensed by the sensor and mountable on the baseboard~~; a~~. A computer interfaced with and receiving data from the sensor, for determining the position and dimensions of each component is mounted on the baseboard based on the sensor data~~; and wherein the~~. The computer creates a virtual model to be displayed on a computer display of a structure composed of each of the components mounted on the baseboard based on the position and dimensions of each of the components. The building components ~~comprise~~ include electrical contact points having electrical signatures. ~~The sensor is a circuit board connected to a power source and comprises a voltmeter, an ammeter, a switching network and a processor receiving data from the voltmeter and for controlling the voltmeter, ammeter and the switching network.~~ The sensor senses the electrical signature, location and orientation on the circuit board of each building component.

Annotated Drawings
Reply to office Action of 9/13/04 1/5

S/N 09/777,

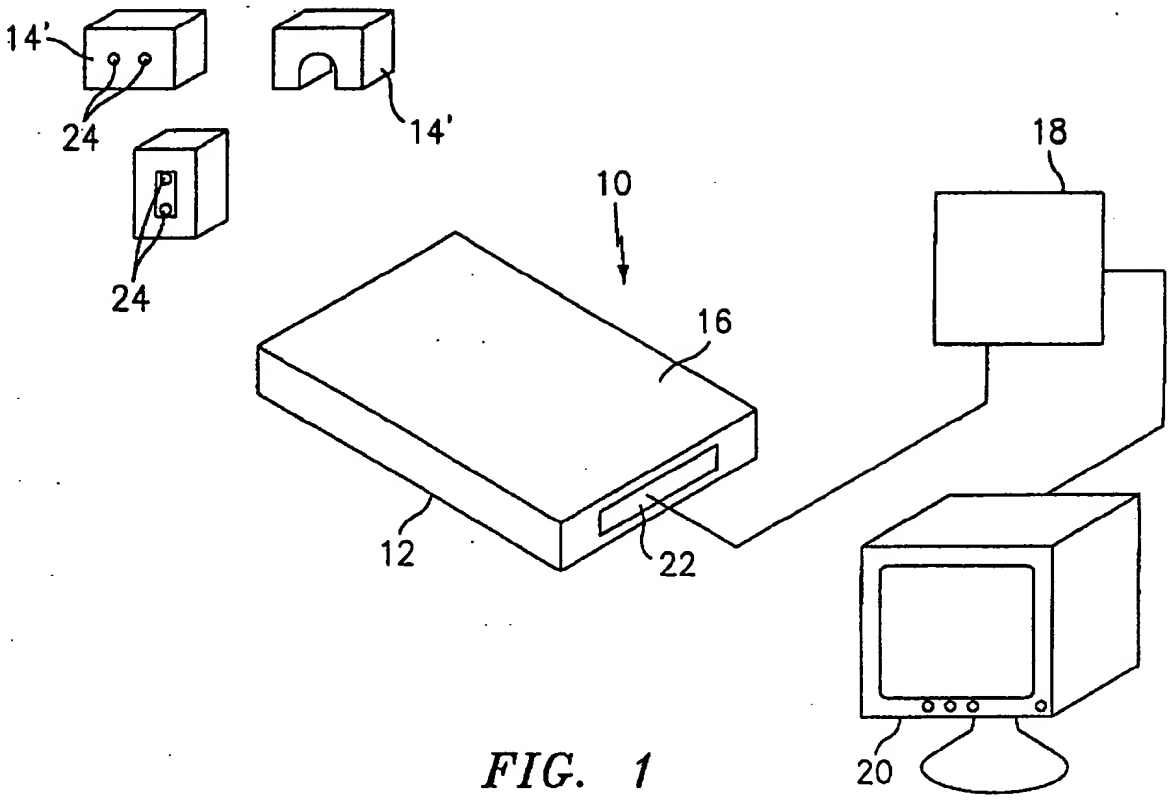

FIG. 1

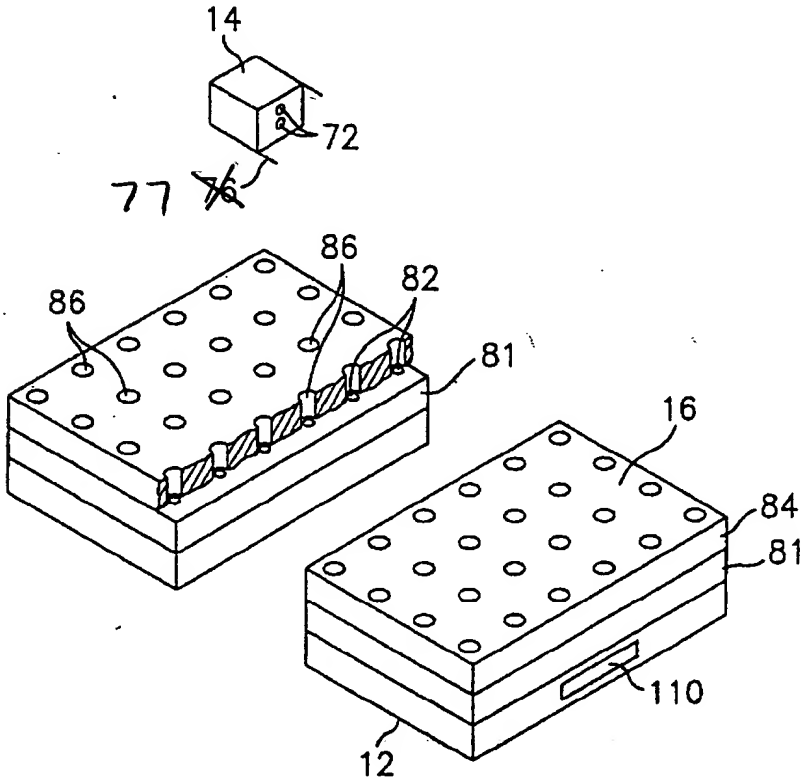

FIG. 2